

2023

- Abdelrady YA, Ashraf NM, **Hamid A**, Thabet HS, Sayed AM, Salem SH, Hassanein EH, Sayed AM. In silico assessment of diterpenes as potential inhibitors of SARS-COV-2 main protease. *Future Virol.* 2023 Apr;18(5):295-308. doi: 10.2217/fvl-2022-0163. Epub 2023 May 22. PMID: 38052000 Free PMC article.
- Abid F, Khan K, Badshah Y, Ashraf NM, Shabbir M, **Hamid A**, Afsar T, Almajwal A, Razak S. Non-synonymous SNPs variants of PRKCG and its association with oncogenes predispose to hepatocellular carcinoma. *Cancer Cell Int.* 2023 Jun 21;23(1):123. doi: 10.1186/s12935-023-02965-z. PMID: 37344815 Free PMC article.
- Ahmed A, Tripathi H, van Meijgaarden KE, Kumar NC, Adiga V, Rakshit S, Parthiban C, Eveline J S, D'Souza G, Dias M, Ottenhoff THM, **Netea MG**, Joosten SA, Vyakarnam A. BCG revaccination in adults enhances pro-inflammatory markers of trained immunity along with anti-inflammatory pathways. *iScience.* 2023 Sep 9;26(10):107889. doi: 10.1016/j.isci.2023.107889. eCollection 2023 Oct 20. PMID: 37817935 Free PMC article.
- Akinosoglou K, Kotsaki A, Gounaridi IM, Christaki E, Metallidis S, Adamis G, Fragkou A, Fantoni M, Rapti A, Kalomenidis I, Chrysos G, Boni G, Kainis I, Alexiou Z, Castelli F, Serino FS, Bakakos P, Nicastrì E, Tzavara V, Safarika A, Ioannou S, Dagna L, Dimakou K, Tzatzagou G, Chini M, Bassetti M, Kotsis V, Angheben A, Tsoukalas G, Selmi C, Spiropoulou OM, Samarkos M, Doumas M, Damoraki G, Masgala A, Papanikolaou I, Argyraki A, Negri M, Leventogiannis K, Sympardi S, Gatselis NK, Petrakis V, **Netea MG**, Panagopoulos P, Sakka V, Milionis H, Dalekos GN, Giamarellos-Bourboulis EJ. Efficacy and safety of early soluble urokinase plasminogen receptor plasma-guided anakinra treatment of COVID-19 pneumonia: A subgroup analysis of the SAVE-MORE randomised trial. *EClinicalMedicine.* 2023 Feb;56:101785. doi: 10.1016/j.eclinm.2022.101785. Epub 2022 Dec 26. PMID: 36590789 Free PMC article.
- Alamoudi E, Schälte Y**, Müller R, Starruß J, Bundgaard N, Graw F, Bruschi L, **Hasenauer J**. FitMultiCell: simulating and parameterizing computational models of multi-scale and multi-cellular processes. *Bioinformatics.* 2023 Nov 1;39(11):btad674. doi: 10.1093/bioinformatics/btad674. PMID: 37947308 Free PMC article.
- Alam S, Afsar SY, Van Echten-Deckert G**. S1P Released by SGPL1-Deficient Astrocytes Enhances Astrocytic ATP Production via S1PR2,4, Thus Keeping Autophagy in Check: Potential Consequences for Brain Health. *Int J Mol Sci.* 2023 Feb 26;24(5):4581. doi: 10.3390/ijms24054581. PMID: 36902011 Free PMC article.
- Alam S, Afsar SY, Wolter MA**, Volk LM, **Mitroi DN**, Meyer Zu Heringdorf D, **van Echten-Deckert G**. S1P Lyase Deficiency in the Brain Promotes Astroglialosis and NLRP3 Inflammasome Activation via Purinergic Signaling. *Cells.* 2023 Jul 13;12(14):1844. doi: 10.3390/cells12141844. PMID: 37508508 Free PMC article.
- Al B**, Bruno M, Röring RJ, Moorlag SJCFM, **Suen TK**, Klück V, Liu R, Debisarun PA, Gaal O, Bhat J, Kabelitz D, van de Veerdonk FL, Joosten LAB, **Netea MG, Placek K**. Peripheral T Cell Populations are Differentially Affected in Familial Mediterranean Fever, Chronic Granulomatous Disease, and Gout. *J Clin Immunol.* 2023 Nov;43(8):2033-2048. doi: 10.1007/s10875-023-01576-7. Epub 2023 Sep 16. PMID: 37714974 Free PMC article.
- Al B, Suen TK, Placek K, Netea MG**. Innate (learned) memory. *J Allergy Clin Immunol.* 2023 Sep;152(3):551-566. doi: 10.1016/j.jaci.2023.06.014. Epub 2023 Jun 27. PMID: 37385546 Review.
- Andersson-Assarsson JC, van Deuren RC, Kristensson FM, Steehouwer M, Sjöholm K, Svensson PA, Pieterse M, Gilissen C, Taube M, Jacobson P, Perkins R, Brunner HG, **Netea MG**, Peltonen M, Carlsson B, Hoischen A, Carlsson LMS. Evolution of age-related mutation-driven clonal haematopoiesis over 20 years is associated with metabolic dysfunction in obesity. *EBioMedicine.* 2023 Jun;92:104621. doi: 10.1016/j.ebiom.2023.104621. Epub 2023 May 18. PMID: 37209535 Free PMC article.

- Antunes D, Gonçalves SM, Matzaraki V, Rodrigues CS, Gonçalves RA, Rocha J, Sáiz J, Marques A, Torrado E, Silvestre R, Rodrigues F, van de Veerdonk FL, Barbas C, **Netea MG**, Kumar V, Cunha C, Carvalho A. Glutamine Metabolism Supports the Functional Activity of Immune Cells against *Aspergillus fumigatus*. *Microbiol Spectr*. 2023 Feb 14;11(1):e0225622. doi: 10.1128/spectrum.02256-22. Epub 2022 Dec 8. PMID: 36475892 Free PMC article.
- Aschenbrenner AC, **Bonaguro L**. huva: A human variation analysis framework to predict gene perturbation from population-scale multi-omics data. *STAR Protoc*. 2023 Mar 24;4(2):102193. doi: 10.1016/j.xpro.2023.102193. Online ahead of print. PMID: 36964906 Free PMC article.
- Azzini AM, Canziani LM, Davis RJ, Mirandola M, Hoelscher M, Meyer L, Laouénan C, Giannella M, Rodríguez-Baño J, Boffetta P, Mates D, Malhotra-Kumar S, Scipione G, Stellmach C, Rinaldi E, **Hasenauer J**, Tacconelli E. How European Research Projects Can Support Vaccination Strategies: The Case of the ORCHESTRA Project for SARS-CoV-2. *Vaccines (Basel)*. 2023 Aug 14;11(8):1361. doi: 10.3390/vaccines11081361. PMID: 37631929 Free PMC article.
- Bahrar H, Bekkering S, Stienstra R, **Netea MG**, Riksen NP. Innate immune memory in cardiometabolic disease. *Cardiovasc Res*. 2023 Feb 16;cvad030. doi: 10.1093/cvr/cvad030. Online ahead of print. PMID: 36795085
- Bajorath J**. Generative kinase inhibitor modeling viewed from a medicinal chemistry perspective. *Future Med Chem*. 2023 Feb;15(4):313-315. doi: 10.4155/fmc-2023-0029. Epub 2023 Mar 9. PMID: 36892087 No abstract available.
- Barret DCA, Schuster D, Rodrigues MJ, Leitner A, Picotti P, Schertler GFX, **Kaupp UB**, Korkhov VM, Marino J. Structural basis of calmodulin modulation of the rod cyclic nucleotide-gated channel. *Proc Natl Acad Sci U S A*. 2023 Apr 11;120(15):e2300309120. doi: 10.1073/pnas.2300309120. Epub 2023 Apr 3. PMID: 37011209
- Baßler K**, Schmidleithner L, Shakiba MH, Elmzahi T, Köhne M, Floess S, Scholz R, Ohkura N, Sadlon T, **Klee K**, Neubauer A, Sakaguchi S, Barry SC, Huehn J, **Bonaguro L**, **Ulas T**, Beyer M. Identification of the novel FOXP3-dependent Treg cell transcription factor MEOX1 by high-dimensional analysis of human CD4+ T cells. *Front Immunol*. 2023 Jul 25;14:1107397. doi: 10.3389/fimmu.2023.1107397. eCollection 2023. PMID: 37559728 Free PMC article.
- Bayerl F, **Bejarano DA**, Bertacchi G, Doffin AC, Gobbini E, Hubert M, Li L, Meiser P, Pedde AM, Posch W, Rupp L, **Schlitzer A**, Schmitz M, Schraml BU, Uderhardt S, Valladeau-Guilemond J, Wilflingseder D, Zaderer V, Böttcher JP. Guidelines for visualization and analysis of DC in tissues using multiparameter fluorescence microscopy imaging methods. *Eur J Immunol*. 2023 Jan 9:e2249923. doi: 10.1002/eji.202249923. Online ahead of print. PMID: 36623939
- Beneduce C, E P Pinto D, **Šulc P**, Sciortino F, Russo J. Two-step nucleation in a binary mixture of patchy particles. *J Chem Phys*. 2023 Apr 21;158(15):154502. doi: 10.1063/5.0140847. PMID: 37093995
- Besio R, Contento BM, Garibaldi N, Filibian M, **Sonntag S**, Shmerling D, Tonelli F, Biggiogera M, Brini M, Salmaso A, Jovanovic M, Marini JC, Rossi A, Forlino A. CaMKII inhibition due to TRIC-B loss-of-function dysregulates SMAD signaling in osteogenesis imperfecta. *Matrix Biol*. 2023 Jun;120:43-59. doi: 10.1016/j.matbio.2023.05.002. Epub 2023 May 11. PMID: 37178987
- Bibi Z, Asghar I, Ashraf NM, Zeb I, Rashid U, **Hamid A**, Ali MK, Hatamleh AA, Al-Dosary MA, Ahmad R, Ali M. Prediction of Phytochemicals for Their Potential to Inhibit New Delhi Metallo β -Lactamase (NDM-1). *Pharmaceuticals (Basel)*. 2023 Oct 3;16(10):1404. doi: 10.3390/ph16101404. PMID: 37895875 Free PMC article.
- Blaauw MJT, Cristina Dos Santos J, Vadaq N, Trypsteen W, van der Heijden W, Groenendijk A, Zhang Z, Li Y, de Mast Q, **Netea MG**, Joosten LAB, Vandekerckhove L, van der Ven A, Matzaraki V. Targeted plasma proteomics identifies MICA and IL1R1 proteins associated with HIV-1 reservoir size. *iScience*. 2023 Mar 22;26(4):106486. doi: 10.1016/j.isci.2023.106486. eCollection 2023 Apr 21. PMID: 37091231 Free PMC article.
- Blank-Stein N**, **Mass E**. Macrophage and monocyte subsets in response to ischemic stroke. *Eur J Immunol*. 2023 Oct;53(10):e2250233. doi: 10.1002/eji.202250233. Epub 2023 Sep 3. PMID: 37467166 Review.
- Blossey AM, Brückner S, May M, Parzmair GP, Sharma H, Shaligram U, Grode L, Kaufmann SHE, **Netea MG**, Schindler C. VPM1002 as Prophylaxis Against Severe Respiratory Tract Infections Including Coronavirus Disease 2019 in the Elderly: A Phase 3 Randomized, Double-Blind, Placebo-Controlled, Multicenter Clinical Study. *Clin Infect Dis*. 2023 Apr 3;76(7):1304-1310. doi: 10.1093/cid/ciac881. PMID: 36358012 Clinical Trial.
- Boahen CK, Oelen R, Le K, **Netea MG**, Franke L, van der Wijst MGP, Kumar V. Integration of *Candida albicans*-induced single-cell gene expression data and secretory protein concentrations reveal genetic regulators of inflammation. *Front Immunol*. 2023 Feb 14;14:1069379. doi: 10.3389/fimmu.2023.1069379. eCollection 2023. PMID: 36865558 Free PMC article.

- Boahen CK, Moorlag SJCFM, Jensen KJ, Matzaraki V, Fanucchi S, Monteiro I, de Bree C, Fok ET, Mhlanga M, Joosten LAB, Aaby P, Benn CS, **Netea MG**, Kumar V. Genetic regulators of cytokine responses upon BCG vaccination in children from West Africa. *J Genet Genomics*. 2023 Jun;50(6):434-446. doi: 10.1016/j.jgg.2023.01.002. Epub 2023 Jan 18. PMID: 36681271 Clinical Trial.
- Breuers S, Mayer G**. Automated ssDNA SELEX Using Histidine-Tagged Target Proteins. *Methods Mol Biol*. 2023;2570:3-11. doi: 10.1007/978-1-0716-2695-5_1. PMID: 36156770
- Bülow MH**, Sellin J. New discoveries in ER-mitochondria communication. *Biochem Soc Trans*. 2023 Apr 26;51(2):571-577. doi: 10.1042/BST20221305. PMID: 36892405 Review.
- Cabău G, Gaal O, Badii M, Nica V, Mirea AM, Hotea I; HINT-consortium; Pamfil C, Popp RA, **Netea MG**, Rednic S, Crişan TO, Joosten LAB. Hyperuricemia remodels the serum proteome toward a higher inflammatory state. *iScience*. 2023 Sep 14;26(10):107909. doi: 10.1016/j.isci.2023.107909. eCollection 2023 Oct 20. PMID: 37810213 Free PMC article.
- Cabrera-Serrano AJ, Sánchez-Maldonado JM, Ter Horst R, Macaudo A, García-Martín P, Benavente Y, Landi S, Clay-Gilmour A, Niazi Y, Espinet B, Rodríguez-Sevilla JJ, Pérez EM, Maffei R, Blanco G, Giaccherini M, Cerhan JR, Marasca R, López-Nevot MÁ, Chen-Liang T, Thomsen H, Gámez I, Campa D, Moreno V, de Sanjosé S, Marcos-Gragera R, García-Álvarez M, Dierssen-Sotos T, Jerez A, Butrym A, Norman AD, Luppi M, Slager SL, Hemminki K, Li Y, Berndt SI, Casabonne D, Alcoceba M, Puiggros A, **Netea MG**, Försti A, Canzian F, Sainz J. Do GWAS-Identified Risk Variants for Chronic Lymphocytic Leukemia Influence Overall Patient Survival and Disease Progression? *Int J Mol Sci*. 2023 Apr 28;24(9):8005. doi: 10.3390/ijms24098005. PMID: 37175717 Free PMC article.
- Cantoni E, Merelli I, Stefanoni D, Tomelleri A, Campochiaro C, Giordano V, Panigada M, Baldissera EM, Merlo Pich L, Natoli V, Ziogas A, Domínguez-Andrés J, De Luca G, Mazza D, Zambrano S, Gnani D, Ferrarini M, Ferrero E, Agresti A, Vergani B, Leone BE, Cenci S, Ravelli A, Matucci-Cerinic M, D'Alessandro A, Joosten LAB, Dagna L, **Netea MG**, Molteni R, Cavalli G. Myelomonocytic cells in giant cell arteritis activate trained immunity programs sustaining inflammation and cytokine production. *Rheumatology (Oxford)*. 2023 Oct 3;62(10):3469-3479. doi: 10.1093/rheumatology/kead061. PMID: 36802235
- Carraro C, Bonaguro L, Srinivasa R, van Uelft M, Isakzai V, Schulte-Schrepping J, Gambhir P, Elmzahi T, Montgomery JV, Hayer H, Li Y, Theis H, Kraut M, Mahbubani KT, Aschenbrenner AC, König I, Fava E, Fried HU, De Domenico E, Beyer M, Saglam A, Schultze JL**. Chromatin accessibility profiling of targeted cell populations with laser capture microdissection coupled to ATAC-seq. *Cell Rep Methods*. 2023 Oct 23;3(10):100598. doi: 10.1016/j.crmeth.2023.100598. Epub 2023 Sep 29. PMID: 37776856 Free PMC article.
- Centola M**, Poppleton E, Ray S, Centola M, Welty R, Valero J, Walter NG, **Šulc P, Famulok M**. A rhythmically pulsing leaf-spring DNA-origami nanoengine that drives a passive follower. *Nat Nanotechnol*. 2023 Oct 19. doi: 10.1038/s41565-023-01516-x. Online ahead of print. PMID: 37857824
- Chen H, **Bajorath J**. Designing highly potent compounds using a chemical language model. *Sci Rep*. 2023 May 7;13(1):7412. doi: 10.1038/s41598-023-34683-x. PMID: 37150793 Free PMC article.
- Chen H, **Bajorath J**. Meta-learning for transformer-based prediction of potent compounds. *Sci Rep*. 2023 Sep 26;13(1):16145. doi: 10.1038/s41598-023-43046-5. PMID: 37752164
- Chen M, Xu L, Wu Y, **Soba P**, Hu C. The organization and function of the Golgi apparatus in dendrite development and neurological disorders. *Genes Dis*. 2022 Dec 20;10(6):2425-2442. doi: 10.1016/j.gendis.2022.11.009. eCollection 2023 Nov. PMID: 37554209 Free PMC article. Review.
- Chen Z, Xing F, **Yu P**, Zhou Y, Luo R, Liu M, Ritz U. Metal-organic framework-based advanced therapeutic tools for antimicrobial applications. *Acta Biomater*. 2024 Feb;175:27-54. doi: 10.1016/j.actbio.2023.12.023. Epub 2023 Dec 17. PMID: 38110135 Review.
- Chen Z, Xing F, Zhou Y, **Yu P**, Xu J, Luo R, Zhou C, Xiang Z, Rommens PM, Liu M, Ritz U. Integrated osteoimmunomodulatory strategies based on designing scaffold surface properties in bone regeneration. *J Mater Chem B*. 2023 Jul 26;11(29):6718-6745. doi: 10.1039/d3tb00727h. PMID: 37350139 Review.
- Choukeife M, Jonczyk A, Mayer G**. Implementation of Emulsion PCR for Amplification of Click-Modified DNA During SELEX. *Methods Mol Biol*. 2023;2570:39-44. doi: 10.1007/978-1-0716-2695-5_3. PMID: 36156772

- Clahsen T, Hadrian K, Notara M, Schlereth SL, Howaldt A, Prokosch V, Volatier T, Hos D, Schroedl F, Kaser-Eichberger A, Heindl LM, Steven P, Bosch JJ, Steinkasserer A, Rokohl AC, Liu H, Mestanoglu M, Kashkar H, Schumacher B, Kiefer F, Schulte-Merker S, Matthaei M, Hou Y, **Fassbender S**, Jantsch J, Zhang W, Enders P, Bachmann B, Bock F, Cursiefen C. The novel role of lymphatic vessels in the pathogenesis of ocular diseases. *Prog Retin Eye Res.* 2023 Sep;96:101157. doi: 10.1016/j.preteyeres.2022.101157. Epub 2023 Feb 8. PMID: 36759312 Review.
- Clausen BE, Amon L, Backer RA, Berod L, Bopp T, Brand A, **Burgdorf S**, Chen L, Da M, Distler U, Dress RJ, Dudziak D, Dutertre CA, Eich C, Gabele A, Geiger M, Ginhoux F, Giusiano L, Godoy GJ, Hamouda AEI, Hatscher L, Heger L, Heidkamp GF, Hernandez LC, Jacobi L, Kaszubowski T, Kong WT, Lehmann CHK, López-López T, Mahnke K, **Nitsche D**, Renkawitz J, Reza RA, Sáez PJ, **Schlautmann L**, Schmitt MT, Seichter A, Sielaff M, Sparwasser T, Stoitzner P, Tchitashvili G, Tenzer S, Tochoedo NR, Vurnek D, **Zink F**, Hieronymus T Guidelines for mouse and human DC functional assays. *Eur J Immunol.* 2023 Dec;53(12):e2249925. doi: 10.1002/eji.202249925. Epub 2022 Dec 23. PMID: 36563126
- Claus J, Ten Doesschate T, Gumbs C, van Werkhoven CH, van der Vaart TW, Janssen AB, Smits G, van Binnendijk R, van der Klis F, van Baarle D, Paganelli FL, Leavis H, Verhagen LM, Joosten SA, Bonten MJM, **Netea MG**, van de Wijgert JHHM; BCG-Corona Study Group. BCG Vaccination of Health Care Workers Does Not Reduce SARS-CoV-2 Infections nor Infection Severity or Duration: a Randomized Placebo-Controlled Trial. *mBio.* 2023 Apr 25;14(2):e0035623. doi: 10.1128/mbio.00356-23. Epub 2023 Mar 28. PMID: 36976004 Free PMC article. Clinical Trial.
- Clavero E, Sanchez-Maldonado JM, Macaudo A, Ter Horst R, Sampaio-Marques B, Jurczynszyn A, Clay-Gilmour A, Stein A, Hildebrandt MAT, Weinhold N, Buda G, García-Sanz R, Tomczak W, Vogel U, Jerez A, Zawirska D, Wątek M, Hofmann JN, Landi S, Spinelli JJ, Butrym A, Kumar A, Martínez-López J, Galimberti S, Sarasquete ME, Subocz E, Iskierka-Jazdzewska E, Giles GG, Rybicka-Ramos M, Kruszewski M, Abildgaard N, Verdejo FG, Sánchez Rovira P, da Silva Filho MI, Kadar K, Razny M, Cozen W, Pelosini M, Jurado M, Bhatti P, Dudzinski M, Druzd-Sitek A, Orciuolo E, Li Y, Norman AD, Zaucha JM, Reis RM, Markiewicz M, Rodríguez Sevilla JJ, Andersen V, Jamroziak K, Hemminki K, Berndt SI, Rajkumar V, Mazur G, Kumar SK, Ludovico P, Nagler A, Chanock SJ, Dumontet C, Machiela MJ, Varkonyi J, Camp NJ, Ziv E, Vangsted AJ, Brown EE, Campa D, Vachon CM, **Netea MG**, Canzian F, Försti A, Sainz J. Polymorphisms within Autophagy-Related Genes as Susceptibility Biomarkers for Multiple Myeloma: A Meta-Analysis of Three Large Cohorts and Functional Characterization. *Int J Mol Sci.* 2023 May 9;24(10):8500. doi: 10.3390/ijms24108500. PMID: 37239846 Free PMC article.
- Cossins BC, van den Munckhof I, Rutten JHW, van der Graaf M, Stienstra R, Joosten LAB, **Netea MG**, Li Y, Riksen NP. Sex-specific Association Between Adipose Tissue Inflammation and Vascular and Metabolic Complications of Obesity. *J Clin Endocrinol Metab.* 2023 Sep 18;108(10):2537-2549. doi: 10.1210/clinem/dgad193. PMID: 37014796
- Dallio M, Ventriglia L, Romeo M, Scognamiglio F, Diano N, Moggio M, Cipullo M, Coppola A, Ziogas A, **Netea MG**, Federico A. Environmental bisphenol A exposure triggers trained immunity-related pathways in monocytes. *Front Immunol.* 2023 Nov 23;14:1270391. doi: 10.3389/fimmu.2023.1270391. eCollection 2023. PMID: 38077323 Free PMC article. Review.
- de Nooijer AH, Kotsaki A, Kranidioti E, Kox M, Pickkers P, Toonen EJM, Giamarellos-Bourboulis EJ, **Netea MG**. Complement activation in severely ill patients with sepsis: no relationship with inflammation and disease severity. *Crit Care.* 2023 Feb 16;27(1):63. doi: 10.1186/s13054-023-04344-6. PMID: 36797757 Free PMC article.
- Debisarun PA, Kilic G, de Bree LCJ, Pennings LJ, van Ingen J, Benn CS, Aaby P, Dijkstra H, Lemmers H, Domínguez-Andrés J, van Crevel R, **Netea MG**. The impact of BCG dose and revaccination on trained immunity. *Clin Immunol.* 2022 Dec 21;246:109208. doi: 10.1016/j.clim.2022.109208. Online ahead of print. PMID: 36565972
- Deckers J, Anbergen T, Hokke AM, de Dreu A, Schrijver DP, de Bruin K, Toner YC, Beldman TJ, Spangler JB, de Greef TFA, Grisoni F, van der Meel R, Joosten LAB, Merks M, **Netea MG**, Mulder WJM. Engineering cytokine therapeutics. *Nat Rev Bioeng.* 2023;1(4):286-303. doi: 10.1038/s44222-023-00030-y. Epub 2023 Feb 16. PMID: 37064653 Free PMC article. Review.
- Delwarde C, Toquet C, Aumond P, **Kayvanjoo AH**, Foucal A, Le Vely B, Baudic M, Lauzier B, Blandin S, Véziers J, Paul-Gilloteaux P, Lecointe S, Baron E, Massaiu I, Poggio P, Rémy S, Anegón I, Le Marec H, Monassier L, Schott JJ, **Mass E**, Barc J, Le Tourneau T, Merot J, Capoulade R. Multimodality imaging and transcriptomics to phenotype mitral valve dystrophy in a unique knock-in Filamin-A rat model. *Cardiovasc Res.* 2023 May 2;119(3):759-771. doi: 10.1093/cvr/cvac136. PMID: 36001550
- Dimitrov T, Moschopoulou AA, Seidel L, Kronenberger T, Kudolo M, Poso A, Geibel C, Wölffing P, Dauch D, Zender L, Schollmeyer D, **Baorath J**, Forster M, Laufer S. Design and Optimization of Novel Benzimidazole- and Imidazo[4,5-b]pyridine-Based ATM Kinase Inhibitors with Subnanomolar Activities. *J Med Chem.* 2023 Jun 8;66(11):7304-7330. doi: 10.1021/acs.jmedchem.2c02104. Epub 2023 May 25. PMID: 37226670

- Dulfer EA, Geckin B, Taks EJM, GeurtsvanKessel CH, Dijkstra H, van Emst L, van der Gaast-de Jongh CE, van Mourik D, Koopmans PC, Domínguez-Andrés J, van Crevel R, van de Maat JS, de Jonge MI, **Netea MG**. Timing and sequence of vaccination against COVID-19 and influenza (TACTIC): a single-blind, placebo-controlled randomized clinical trial. *Lancet Reg Health Eur*. 2023 Apr 12;29:100628. doi: 10.1016/j.lanepe.2023.100628. eCollection 2023 Jun. PMID: 37261212 Free PMC article.
- Dulfer EA, Geckin B, Taks EJM, GeurtsvanKessel CH, Dijkstra H, van Emst L, van der Gaast-de Jongh CE, Koopmans PC, Domínguez-Andrés J, van Crevel R, van de Maat JS, de Jonge MI, **Netea MG**. Timing and sequence of vaccination against COVID-19 and influenza - Author's reply. *Lancet Reg Health Eur*. 2023 Jul;30:100669. doi: 10.1016/j.lanepe.2023.100669. Epub 2023 Jun 15. PMID: 37337587 Free PMC article. No abstract available.
- Dulfer EA, Joosten LAB, **Netea MG**. Enduring echoes: Post-infectious long-term changes in innate immunity. *Eur J Intern Med*. 2023 Dec 21:S0953-6205(23)00456-9. doi: 10.1016/j.ejim.2023.12.020. Online ahead of print. PMID: 38135583 Review.
- Edwards-Faret G**, de Vin F, Slezak M, Gollenbeck L, Karaman R, Shinmyo Y, Batiuk MY, Pando CM, Urschitz J, Rincon MY, Moisyadi S, Schnütgen F, Kawasaki H, Schmucker D, Holt MG. A New Technical Approach for Cross-species Examination of Neuronal Wiring and Adult Neuron-glia Functions. *Neuroscience*. 2023 Jan 1;508:40-51. doi: 10.1016/j.neuroscience.2022.11.029. Epub 2022 Dec 1. PMID: 36464177
- Feng G, Zhu C, Lin CY, Bredemeyer A, **Förster I**, Kreisel D, Lavine KJ. CCL17 Protects Against Viral Myocarditis by Suppressing the Recruitment of Regulatory T Cells. *J Am Heart Assoc*. 2023 Feb 21;12(4):e028442. doi: 10.1161/JAHA.122.028442. Epub 2023 Feb 8. PMID: 36752267 Free PMC article.
- Ferreira AV, **Netea MG**. Hematopoietic memory of severe COVID-19 infection. *Cell Res*. 2023 Oct 20. doi: 10.1038/s41422-023-00885-1. Online ahead of print. PMID: 37864057 No abstract available.
- Ferreira AV, Alarcon-Barrera JC, Domínguez-Andrés J, Bulut Ö, Kilic G, Debisarun PA, Röring RJ, Özhan HN, Terschlüsen E, Ziogas A, Kostidis S, Mohammed Y, Matzaraki V, Renieris G, Giamarellos-Bourboulis EJ, **Netea MG**, Giera M. Fatty acid desaturation and lipoxygenase pathways support trained immunity. *Nat Commun*. 2023 Nov 15;14(1):7385. doi: 10.1038/s41467-023-43315-x. PMID: 37968313 Free PMC article.
- Flores Gomez D, Bekkering S, Horst RT, Cossins B, van den Munckhof ICL, Rutten JHW, Joosten LAB, **Netea MG**, Riksen NP. The effect of leptin on trained innate immunity and on systemic inflammation in subjects with obesity. *J Leukoc Biol*. 2023 Sep 30;qiad118. doi: 10.1093/jleuko/qiad118. Online ahead of print. PMID: 37776323
- Föhse K, Debisarun PA, Kilic G, van Dodewaard-de Jong JM, **Netea MG**. Evaluation of the safety and immunological effects of Bacillus Calmette-Guérin in combination with checkpoint inhibitor therapy in a patient with neuroendocrine carcinoma: a case report. *J Med Case Rep*. 2023 Sep 4;17(1):377. doi: 10.1186/s13256-023-04117-3. PMID: 37661259 Free PMC article.
- Frishberg A, Milman N, Alpert A, Spitzer H, Asani B, Schiefelbein JB, Bakin E, Regev-Berman K, Priglinger SG, **Schultze JL**, Theis FJ, Shen-Orr SS. Reconstructing disease dynamics for mechanistic insights and clinical benefit. *Nat Commun*. 2023 Oct 27;14(1):6840. doi: 10.1038/s41467-023-42354-8. PMID: 37891175 Free PMC article.
- Gambacorta N**, Ciriaco F, Amoroso N, Altomare CD, **Bajorath J**, Nicolotti O. CIRCE: Web-Based Platform for the Prediction of Cannabinoid Receptor Ligands Using Explainable Machine Learning. *J Chem Inf Model*. 2023 Sep 7. doi: 10.1021/acs.jcim.3c00914. Online ahead of print. PMID: 37675493
- Gentilotti E, Górska A, Tami A, **Gusinow R**, Mirandola M, Rodríguez Baño J, Palacios Baena ZR, Rossi E, **Hasenauer J**, Lopes-Rafegas I, Righi E, Caroccia N, Cataudella S, Pasquini Z, Osmo T, Del Piccolo L, Savoldi A, Kumar-Singh S, Mazzaferri F, Caponcello MG, de Boer G, Hara GL; ORCHESTRA Study Group; De Nardo P, Malhotra S, Canziani LM, Ghosn J, Florence AM, Lafhej N, van der Gun BTF, Giannela M, Laouénan C, Tacconelli E. Clinical phenotypes and quality of life to define post-COVID-19 syndrome: a cluster analysis of the multinational, prospective ORCHESTRA cohort. *EClinicalMedicine*. 2023 Jul 21;62:102107. doi: 10.1016/j.eclinm.2023.102107. eCollection 2023 Aug. PMID: 37654668 Free PMC article.
- Gopalakrishnan J, Feistel K, Friedrich BM, Grapin-Botton A, Jurisch-Yaksi N, **Mass E**, Mick DU, Müller RU, May-Simera H, Schermer B, Schmidts M, Walentek P, Wachten D. Emerging principles of primary cilia dynamics in controlling tissue organization and function. *EMBO J*. 2023 Nov 2;42(21):e113891. doi: 10.15252/embj.2023113891. Epub 2023 Sep 25. PMID: 37743763 Free PMC article. Review.
- Grahn E, Kaufmann SV, Askarova M, Ninov M, Welp LM, Berger TK, Urlaub H, **Kaupp UB**. Control of intracellular pH and bicarbonate by CO₂ diffusion into human sperm. *Nat Commun*. 2023 Sep 5;14(1):5395. doi: 10.1038/s41467-023-40855-0. PMID: 37669933 Free PMC article.

- Gressier E, **Schulte-Schrepping J**, Petrov L, Brumhard S, Stubbemann P, Hiller A, Obermayer B, Spitzer J, Kostevc T, Whitney PG, Bachem A, Odanic A, van de Sandt C, Nguyen THO, Ashhurst T, Wilson K, Oates CVL, Gearing LJ, Meischel T, Hochheiser K, Greyer M, Clarke M, Kreutzenbeck M, Gabriel SS, Kastenmüller W, Kurts C, Londrigan SL, Kallies A, Kedzierska K, Hertzog PJ, Latz E, Chen YE, Radford KJ, Chopin M, Schroeder J, Kurth F, Gebhardt T, Sander LE, Sawitzki B, **Schultze JL**, Schmidt SV, Bedoui S. CD4+ T cell calibration of antigen-presenting cells optimizes antiviral CD8+ T cell immunity. *Nat Immunol.* 2023 Jun;24(6):979-990. doi: 10.1038/s41590-023-01517-x. Epub 2023 May 15. PMID: 37188942
- Guel T, Scholtissek B, **Siegl J**, Fetter T, **Mayer G**, Bieber T, Wenzel J. Dermatomyositis autoantigen CHD4 forms immune stimulatory complexes with endogenous DNA. *Exp Dermatol.* 2023 Jul;32(7):965-974. doi: 10.1111/exd.14799. Epub 2023 Mar 30. PMID: 36995066
- Haydell M, Ma Y.** DNA Origami: Recent Progress and Applications. *Methods Mol Biol.* 2023;2639:3-19. doi: 10.1007/978-1-0716-3028-0_1. PMID: 37166708
- Hrovatin K, Bastidas-Ponce A, Bakhti M, Zappia L, **Büttner M**, Salinno C, Sterr M, Böttcher A, Migliorini A, Lickert H, Theis FJ. Delineating mouse β -cell identity during lifetime and in diabetes with a single cell atlas. *Nat Metab.* 2023 Sep 11. doi: 10.1038/s42255-023-00876-x. Online ahead of print. PMID: 37697055
- Huth M, Arruda J, Gusinow R, Contento L**, Tacconelli E, **Hasenauer J.** Accessibility of covariance information creates vulnerability in Federated Learning frameworks. *Bioinformatics.* 2023 Sep 2;39(9):btad531. doi: 10.1093/bioinformatics/btad531. PMID: 37647639 Free PMC article.
- Iyappan A, Mauer K, Menges P, Sürün B, Tremper G, Parker S, Kirli K, Kraus F, Unni D, **Schultze JL**, Bork P, **Ulas T**, Nahnsen S, the GHGA Consortium, Metadata Schema for the German Human Genome-Phenome Archive (Version 1). Zenodo 2023 Sep.
- Janela T, Takeuchi K, Bajorath J.** Predicting Potent Compounds Using a Conditional Variational Autoencoder Based upon a New Structure-Potency Fingerprint. *Biomolecules.* 2023 Feb 18;13(2):393. doi: 10.3390/biom13020393. PMID: 36830761 Free PMC article.
- Janela T, Bajorath J.** Large-Scale Predictions of Compound Potency with Original and Modified Activity Classes Reveal General Prediction Characteristics and Intrinsic Limitations of Conventional Benchmarking Calculations. *Pharmaceuticals (Basel).* 2023 Apr 2;16(4):530. doi: 10.3390/ph16040530. PMID: 37111287 Free PMC article.
- Janela T, Bajorath J.** Rationalizing general limitations in assessing and comparing methods for compound potency prediction. *Sci Rep.* 2023 Oct 19;13(1):17816. doi: 10.1038/s41598-023-45086-3. PMID: 37857835 Free PMC article.
- Janela T, Bajorath J.** Anatomy of Potency Predictions Focusing on Structural Analogues with Increasing Potency Differences Including Activity Cliffs. *J Chem Inf Model.* 2023 Nov 27;63(22):7032-7044. doi: 10.1021/acs.jcim.3c01530. Epub 2023 Nov 9. PMID: 37943257
- Kapellos TS, Baßler K, Fujii W**, Nalkurthi C, Schaar AC, **Bonaguro L, Pecht T**, Galvao I, **Agrawal S**, Saglam A, **Dudkin E, Frishberg A**, de Domenico E, **Horne A**, Donovan C, Kim RY, Gallego-Ortega D, Gillett TE, Ansari M, **Schulte-Schrepping J**, Offermann N, Antignano I, **Sivri B**, Lu W, Eapen MS, **van Uelft M**, Osei-Sarpong C, van den Berge M, Donker HC, Groen HJM, Sohal SS, Klein J, Schreiber T, Feißt A, Yildirim AÖ, Schiller HB, Nawijn MC, Becker M, Händler K, Beyer M, Capasso M, **Ulas T, Hasenauer J**, Pizarro C, Theis FJ, Hansbro PM, Skowasch D, **Schultze JL.** Systemic alterations in neutrophils and their precursors in early-stage chronic obstructive pulmonary disease. *Cell Rep.* 2023 Jun 27;42(6):112525. doi: 10.1016/j.celrep.2023.112525. Epub 2023 May 26. PMID: 37243592 Free PMC article.
- Kasper BS, Thomas C, Albers A, Kasper EM, **Sandhoff K.** From amaurotic idiocy to biochemically defined lipid storage diseases: the first identification of GM1-Gangliosidosis. *Free Neuropathol.* 2023 Aug 8;4:4-12. doi: 10.17879/freeneuropathology-2023-4845. eCollection 2023 Jan. PMID: 37577107 Free PMC article.
- Katzmarski N**, Domínguez-Andrés J, **Cirovic B**, Renieris G, Ciarlo E, Le Roy D, Lepikhov K, Kattler K, Gasparoni G, Händler K, Theis H, Beyer M, van der Meer JWM, Joosten LAB, Walter J, **Schultze JL**, Roger T, Giamarellos-Bourboulis EJ, **Schlitzer A, Netea MG.** Author Correction: Transmission of trained immunity and heterologous resistance to infections across generations. *Nat Immunol.* 2023 Feb;24(2):371-372. doi: 10.1038/s41590-023-01426-z. PMID: 36653441 No abstract available.
- Kayvanjoo AH, Splichalova I, Bejarano DA, Huang H, Mauel K, Makdissi N, Heider D, Balzer NR**, Osei-Sarpong C, **Baßler K, Schultze JL**, Uderhardt S, **Kiermaier E**, Beyer M, **Schlitzer A, Mass E.** Fetal liver macrophages contribute to the hematopoietic. *BioRxiv* 2023, doi.org/10.1101/2023.02.21.529403. Online ahead of print.
- Khan SA, **Kojour MAM**, Han YS. Recent trends in insect gut immunity. *Front Immunol.* 2023 Dec 18;14:1272143. doi: 10.3389/fimmu.2023.1272143. eCollection 2023. PMID: 38193088 Free PMC article. Review.

- Khmelinskaia A**, Schwille P, Franquelim HG. Binding and Characterization of DNA Origami Nanostructures on Lipid Membranes. *Methods Mol Biol.* 2023;2639:231-255. doi: 10.1007/978-1-0716-3028-0_14. PMID: 37166721
- Knoll R, Bonaguro L**, Dos Santos JC, **Warnat-Herresthal S**, Jacobs-Cleophas MCP, Blümel E, Reusch N, Horne A, Herbert M, Nuesch-Germano M, Otten T, van der Heijden WA, van de Wijer L, Shalek AK, Händler K, Becker M, Beyer MD, **Netea MG**, Joosten LAB, van der Ven AJAM, **Schultze JL**, Aschenbrenner AC. Identification of drug candidates targeting monocyte reprogramming in people living with HIV. *Front Immunol.* 2023 Nov 20;14:1275136. doi: 10.3389/fimmu.2023.1275136. eCollection 2023. PMID: 38077315 Free PMC article.
- Koekenbier EL, Fohse K, van de Maat JS, Oosterheert JJ, van Nieuwkoop C, Hoogerwerf JJ, Grobusch MP, van den Bosch MAAJ, van de Wijgert JHH, **Netea MG**, Rosendaal FR, Bonten MJM, Werkhoven CHHV; BCG-PRIME study group. Bacillus Calmette-Guérin vaccine for prevention of COVID-19 and other respiratory tract infections in older adults with comorbidities: a randomized controlled trial. *Clin Microbiol Infect.* 2023 Jun;29(6):781-788. doi: 10.1016/j.cmi.2023.01.019. Epub 2023 Feb 2. PMID: 36736662 Free PMC article. Clinical Trial.
- Kooistra EJ, Dahm K, van Herwaarden AE, Gerretsen J, **Nuesch Germano M**, Mauer K, Smeets RL, van der Velde S, van den Berg MJW, van der Hoeven JG, Aschenbrenner AC, **Schultze JL**, **Ulas T**, Kox M, Pickkers P. Molecular mechanisms and treatment responses of pulmonary fibrosis in severe COVID-19. *Respir Res.* 2023 Aug 9;24(1):196. doi: 10.1186/s12931-023-02496-1. PMID: 37559053 Free PMC article.
- Kullaya VI, Temba GS, Vadaq N, Njau J, Boahen CK, Nkambule BB, Thibord F, Chen MH, **Pecht T**, Lyamuya F, Kumar V, **Netea MG**, Mmbaga BT, van der Ven A, Johnson AD, de Mast Q. Genetic and nongenetic drivers of platelet reactivity in healthy Tanzanian individuals. *J Thromb Haemost.* 2023 Nov 27:S1538-7836(23)00852-8. doi: 10.1016/j.jth.2023.11.014. Online ahead of print. PMID: 38029856
- Kulsvehagen L, **Balzer N**; DGfI Young Immunologists board. The Young Immunologists' Podcast: Immunology and Much More. *Eur J Immunol.* 2023 Aug;53(8):e2350595. doi: 10.1002/eji.202350595. PMID: 37405819 No abstract available.
- Lakrisenko P, Stapor P, **Grein S**, Paszkowski Ł, **Pathirana D**, Fröhlich F, Lines GT, Weindl D, **Hasenauer J**. Efficient computation of adjoint sensitivities at steady-state in ODE models of biochemical reaction networks. *PLoS Comput Biol.* 2023 Jan 3;19(1):e1010783. doi: 10.1371/journal.pcbi.1010783. eCollection 2023 Jan. PMID: 36595539 Free PMC article.
- Lamens A, Bajorath J**. Explaining Accurate Predictions of Multitarget Compounds with Machine Learning Models Derived for Individual Targets. *Molecules.* 2023 Jan 13;28(2):825. doi: 10.3390/molecules28020825. PMID: 36677879
- Lamens A, Bajorath J**. Explaining Multiclass Compound Activity Predictions Using Counterfactuals and Shapley Values. *Molecules.* 2023 Jul 24;28(14):5601. doi: 10.3390/molecules28145601. PMID: 37513472 Free PMC article.
- Lamens A, Bajorath J**. Generation of Molecular Counterfactuals for Explainable Machine Learning Based on Core-Substituent Recombination. *ChemMedChem.* 2023 Nov 20:e202300586. doi: 10.1002/cmdc.202300586. Online ahead of print. PMID: 37983655
- Larcombe DE, Bohovych IM, Pradhan A, Ma Q, Hickey E, Leaves I, Cameron G, Avelar GM, de Assis LJ, Childers DS, Bain JM, Lagree K, Mitchell AP, **Netea MG**, Erwig LP, Gow NAR, Brown AJ. Glucose-enhanced oxidative stress resistance-A protective anticipatory response that enhances the fitness of *Candida albicans* during systemic infection. *PLoS Pathog.* 2023 Jul 10;19(7):e1011505. doi: 10.1371/journal.ppat.1011505. eCollection 2023 Jul. PMID: 37428810 Free PMC article.
- Le Gleut R, Plank M, Pütz P, Radon K, Bakuli A, Rubio-Acero R, Paunovic I, Rieß F, Winter S, Reinkemeyer C, **Schälte Y**, Olbrich L, Hannes M, Kroidl I, Noreña I, Janke C, Wieser A, Hoelscher M, Fuchs C, Castelletti N; KoCo19/ORCHESTRA-study group. The representative COVID-19 cohort Munich (KoCo19): from the beginning of the pandemic to the Delta virus variant. *BMC Infect Dis.* 2023 Jul 13;23(1):466. doi: 10.1186/s12879-023-08435-1. PMID: 37442952 Free PMC article.
- Liu Z, Wang H, Li Z, Dress RJ, Zhu Y, Zhang S, De Feo D, Kong WT, Cai P, Shin A, Piot C, **Yu J**, Gu Y, Zhang M, Gao C, Chen L, Wang H, Vétillard M, Guernonprez P, Kwok I, Ng LG, Chakarov S, **Schlitzer A**, Becher B, Dutertre CA, Su B, Ginhoux F. Dendritic cell type 3 arises from Ly6C+ monocyte-dendritic cell progenitors. *Immunity.* 2023 Aug 8;56(8):1761-1777.e6. doi: 10.1016/j.immuni.2023.07.001. Epub 2023 Jul 27. PMID: 37506694
- Li Q, Centola M, Keppner D, Valero J, Famulok M**. Reconfigurable Nanopolygons Made of DNA Catenanes. *Bioconjug Chem.* 2023 Jan 18;34(1):105-110. doi: 10.1021/acs.bioconjchem.2c00464. Epub 2023 Jan 3. PMID: 36595299
- Li W, Moorlag SJCFM, Koeken VACM, Röring RJ, de Bree LCJ, Mourits VP, Gupta MK, Zhang B, Fu J, Zhang Z, Grondman I, van Meijgaarden KE, Zhou L, Alaswad A, Joosten LAB, van Crevel R, Xu CJ, **Netea MG**, Li Y. A single-cell view on host immune transcriptional response to in vivo BCG-induced trained immunity. *Cell Rep.* 2023 May 7;42(5):112487. doi: 10.1016/j.celrep.2023.112487. Online ahead of print. PMID: 37155329

- Li XJ, Morgan C, Nadar-Ponniah PT, **Kolanus W**, Doetzlhofer A. TRIM71 reactivation enhances the mitotic and hair cell-forming potential of cochlear supporting cells. *EMBO Rep*. 2023 Sep 6;24(9):e56562. doi: 10.15252/embr.202256562. Epub 2023 Jul 26. PMID: 37492931
- Ma H, Xing F, Zhou Y, **Yu P**, Luo R, Xu J, Xiang Z, Rommens PM, Duan X, Ritz U. Design and fabrication of intracellular therapeutic cargo delivery systems based on nanomaterials: current status and future perspectives. *J Mater Chem B*. 2023 Aug 24;11(33):7873-7912. doi: 10.1039/d3tb01008b. PMID: 37551112 Review.
- Maccauda A, Briem K, Clay-Gilmour A, Cozen W, Försti A, Giaccherini M, Corradi C, Sainz J, Niazi Y, Ter Horst R, Li Y, **Netea MG**, Vogel U, Hemminki K, Slager SL, Varkonyi J, Andersen V, Iskierka-Jazdzewska E, Martínez-Lopez J, Zaucha J, Camp NJ, Rajkumar SV, Druzd-Sitek A, Bhatti P, Chanock SJ, Kumar SK, Subocz E, Mazur G, Landi S, Machiela MJ, Jerez A, Norman AD, Hildebrandt MAT, Kadar K, Berndt SI, Ziv E, Buda G, Nagler A, Dumontet C, Rażny M, Watek M, Butrym A, Grzasko N, Dudzinski M, Rybicka-Ramos M, Matera EL, García-Sanz R, Goldschmidt H, Jamroziak K, Jurczyszyn A, Clavero E, Giles GG, Pelosini M, Zawirska D, Kruszewski M, Marques H, Hastrup E, Sánchez-Maldonado JM, Bertsch U, Rymko M, Raab MS, Brown EE, Hofmann JN, Vachon C, Campa D, Canzian F. Identification of novel genetic loci for risk of multiple myeloma by functional annotation. *Leukemia*. 2023 Nov;37(11):2326-2329. doi: 10.1038/s41375-023-02022-8. Epub 2023 Sep 18. PMID: 37723249 Free PMC article. No abstract available.
- Madsen AMR, Schaltz-Buchholzer F, Nielsen S, Benfield T, Bjerregaard-Andersen M, Dalgaard LS, Dam C, Ditlev SB, Faizi G, Azizi M, Hameed ZN, Johansen IS, Kofoed PE, Krause TG, Kristensen GS, Loekkegaard ECL, Mogensen CB, Mohamed L, Oedegaard ES, Ostenfeld A, Soerensen MK, Wejse C, **Netea MG**, Aaby P, Benn CS. Using BCG vaccine to enhance non-specific protection of health care workers during the COVID-19 pandemic: a randomized controlled trial. *J Infect Dis*. 2023 Sep 29;jiad422. doi: 10.1093/infdis/jiad422. Online ahead of print. PMID: 37774494
- Mallik BB, Stanislaw J, Alawathurage TM, Khmelinskaia A**. De Novo Design of Polyhedral Protein Assemblies: Before and After the AI Revolution. *Chembiochem*. 2023 Aug 1;24(15):e202300117. doi: 10.1002/cbic.202300117. Epub 2023 Jul 12. PMID: 37014094 Review.
- Mass E**, Nimmerjahn F, Kierdorf K, **Schlitzer A**. Tissue-specific macrophages: how they develop and choreograph tissue biology. *Nat Rev Immunol*. 2023 Sep;23(9):563-579. doi: 10.1038/s41577-023-00848-y. Epub 2023 Mar 15. PMID: 36922638 Free PMC article. Review.
- Mass E**. The stunning clodronate. *J Exp Med*. 2023 Jun 5;220(6):e20230339. doi: 10.1084/jem.20230339. Epub 2023 Mar 28. PMID: 36976179 Free PMC article.
- Mass E**. Human macrophages choreograph tissue development. *Trends Immunol*. 2023 Nov;44(11):865-867. doi: 10.1016/j.it.2023.09.010. Epub 2023 Oct 11. PMID: 37833121
- Mastropietro, A., Pasculli, G., **Bajorath, J**. Learning characteristics of graph neural networks predicting protein–ligand affinities. *Nat Mach Intell* 5, 2023 Nov 13; 1427–1436. <https://doi.org/10.1038/s42256-023-00756-9>
- Mastropietro A, **Feldmann C, Bajorath J**. Calculation of exact Shapley values for explaining support vector machine models using the radial basis function kernel. *Sci Rep*. 2023 Nov 10;13(1):19561. doi: 10.1038/s41598-023-46930-2. PMID: 37949930 Free PMC article.
- Mattila TM, Svensson EM, Juras A, Günther T, Kashuba N, Ala-Hulkko T, Chyleński M, McKenna J, Pospieszny Ł, Constantinescu M, Rotea M, Palincaş N, Wilk S, Czerniak L, Kruk J, Łapo J, Makarowicz P, Potekhina I, Soficar A, Szmyt M, Szostek K, Götherström A, Storå J, **Netea MG**, Nikitin AG, Persson P, Malmström H, Jakobsson M. Genetic continuity, isolation, and gene flow in Stone Age Central and Eastern Europe. *Commun Biol*. 2023 Aug 9;6(1):793. doi: 10.1038/s42003-023-05131-3. PMID: 37558731 Free PMC article.
- Menaker Y, van den Munckhof I, **Scarpa A, Placek K**, Brandes-Leibovitz R, Glantzspiegel Y, Joosten LAB, Rutten JHW, **Netea MG**, Gat-Viks I, Riksen NP. Stratification of Atherosclerosis based on Plasma Metabolic States. *J Clin Endocrinol Metab*. 2023 Dec 4;dgad672. doi: 10.1210/clinem/dgad672. Online ahead of print. PMID: 38044551
- Meroni M, Chiappori F, Paolini E, Longo M, **De Caro E**, Mosca E, Chiodi A, Merelli I, Badiali S, Maggioni M, Mezzelani A, Valenti L, Ludovica Fracanzani A, Dongiovanni P. A novel gene signature to diagnose MASLD in metabolically unhealthy obese individuals. *Biochem Pharmacol*. 2023 Dec;218:115925. doi: 10.1016/j.bcp.2023.115925. Epub 2023 Nov 19. PMID: 37981173
- Mol JQ, van Tuijl J, Bekkering S, van der Heijden CDCC, Damen SAJ, Cossins BC, van Emst L, Nielen TM, Rodwell L, Li Y, Pop GAM, **Netea MG**, van Royen N, Riksen NP, El Messaoudi S. Peripheral blood mononuclear cell hyperresponsiveness in patients with premature myocardial infarction without traditional risk factors. *iScience*. 2023 Jun 19;26(7):107183. doi: 10.1016/j.isci.2023.107183. eCollection 2023 Jul 21. PMID: 37456854 Free PMC article.
- Müller S, Schultze JL**. Systems analysis of human innate immunity in COVID-19. *Semin Immunol*. 2023 Jul;68:101778. doi: 10.1016/j.smim.2023.101778. Epub 2023 May 22. PMID: 37267758 Free PMC article. Review.

- Müller S, Kröger C, Schultze JL**, Aschenbrenner AC. Whole blood stimulation as a tool for studying the human immune system. *Eur J Immunol*. 2023 Dec 16:e2350519. doi: 10.1002/eji.202350519. Online ahead of print. PMID: 38103010 Review.
- Netea MG**, Mulder WJM. TH17 cells boosted by nanoparticle-bound fungal motifs. *Nat Biomed Eng*. 2023 Jan;7(1):6-7. doi: 10.1038/s41551-022-00992-1. PMID: 36564628
- Nitta Y, Kawai H, Maki R, Osaka J, Hakeda-Suzuki S, Nagai Y, Doubková K, Uehara T, Watanabe K, Kosaki K, Suzuki T, **Tavosanis G**, Sugie A. Direct evaluation of neuroaxonal degeneration with the causative genes of neurodegenerative diseases in *Drosophila* using the automated axon quantification system, MeDUsA. *Hum Mol Genet*. 2023 Apr 20;32(9):1524-1538. doi: 10.1093/hmg/ddac307. PMID: 36611008
- Ochando J, Mulder WJM, Madsen JC, **Netea MG**, Duivenvoorden R. Trained immunity - basic concepts and contributions to immunopathology. *Nat Rev Nephrol*. 2023 Jan;19(1):23-37. doi: 10.1038/s41581-022-00633-5. Epub 2022 Oct 17. PMID: 36253509 Free PMC article. Review.
- Peng C, Rabold K, **Netea MG**, Jaeger M, Netea-Maier RT. Influence of Lenvatinib on the Functional Reprogramming of Peripheral Myeloid Cells in the Context of Non-Medullary Thyroid Carcinoma. *Pharmaceutics*. 2023 Jan 26;15(2):412. doi: 10.3390/pharmaceutics15020412. PMID: 36839733 Free PMC article.
- Pietruś W**, Kurczab R, Warszycki D, Bojarski AJ, **Bajorath J**. Isomeric Activity Cliffs-A Case Study for Fluorine Substitution of Aminergic G Protein-Coupled Receptor Ligands. *Molecules*. 2023 Jan 4;28(2):490. doi: 10.3390/molecules28020490. PMID: 36677547
- Pinto DEP, **Šulc P**, Sciortino F, Russo J. Design strategies for the self-assembly of polyhedral shells. *Proc Natl Acad Sci U S A*. 2023 Apr 18;120(16):e2219458120. doi: 10.1073/pnas.2219458120. Epub 2023 Apr 11. PMID: 37040398
- Pleyer L, Heibl S, Tinchon C, Vallet S, Schreder M, Melchardt T, Stute N, Föhrenbach Quiroz KT, Leisch M, Egle A, Scagnetti L, Wolf D, Beswick R, Drost M, Larcher-Senn J, Grochtdreis T, **Vaisband M, Hasenauer J**, Zaborisky N, Greil R, Stauder R. Health-Related Quality of Life as Assessed by the EQ-5D-5L Predicts Outcomes of Patients Treated with Azacitidine-A Prospective Cohort Study by the AGMT. *Cancers (Basel)*. 2023 Feb 22;15(5):1388. doi: 10.3390/cancers15051388. PMID: 36900181 Free PMC article.
- Probst HC, Stoitzner P, Amon L, Backer RA, Brand A, Chen J, Clausen BE, Dieckmann S, Dudziak D, Heger L, Hodapp K, Hornsteiner F, Hovav AH, Jacobi L, Ji X, Kamenjarin N, Lahl K, Lahmar I, Lakus J, Lehmann CHK, Ortner D, Picard M, Roberti MP, Rosnagel L, Saba Y, Schalla C, **Schlitzer A**, Schraml BU, Schütze K, Seichter A, Seré K, Seretis A, Sopper S, Strandt H, Sykora MM, **Theobald H**, Tripp CH, Zitvogel L. Guidelines for DC preparation and flow cytometry analysis of mouse nonlymphoid tissues. *Eur J Immunol*. 2023 Nov;53(11):e2249819. doi: 10.1002/eji.202249819. Epub 2022 Dec 13. PMID: 36512638
- Raimúndez E, Fedders M, Hasenauer J**. Posterior marginalization accelerates Bayesian inference for dynamical models of biological processes. *iScience*. 2023 Sep 28;26(11):108083. doi: 10.1016/j.isci.2023.108083. eCollection 2023 Nov 17. PMID: 37867942 Free PMC article.
- Richter V, Rist A, Kislinger G, Laumann M, **Schoofs A, Miroshnikov A, Pankratz MJ**, Cardona A, Thum AS. Morphology and ultrastructure of external sense organs of *Drosophila* larvae. *bioRxiv* 2023.08.23.554405. doi: <https://doi.org/10.1101/2023.08.23.554405>
- Rother N, Yanginlar C, Prévot G, Jonkman I, Jacobs M, van Leent MMT, van Heck J, Matzaraki V, Azzun A, Morla-Folch J, Ranzenigo A, Wang W, van der Meel R, Fayad ZA, Riksen NP, Hilbrands LB, Lindeboom RGH, Martens JHA, Vermeulen M, Joosten LAB, **Netea MG**, Mulder WJM, van der Vlag J, Teunissen AJP, Duivenvoorden R. Acid ceramidase regulates innate immune memory. *Cell Rep*. 2023 Dec 26;42(12):113458. doi: 10.1016/j.celrep.2023.113458. Epub 2023 Nov 22. PMID: 37995184
- Rüchel N, Oldenburg M, Janssen S, Pandya AA, Liu W, Vasileiou E, Hein D, Jepsen VH, Fischer U, Picard D, Kögler G, Hauer J, Auer F, Beer A, Adams O, MacKenzie C, Jaeger M, **Netea MG**, Borkhardt A, Gössling KL. Cytokine Hyperresponsiveness in Children With ETV6::RUNX1-positive Acute Lymphoblastic Leukemia After Challenge With Common Pathogens. *Hemasphere*. 2023 Jan 31;7(2):e835. doi: 10.1097/HS9.0000000000000835. eCollection 2023 Feb. PMID: 36741356 Free PMC article. No abstract available.
- Samaras C, Kyriazopoulou E, Poulakou G, Reiner E, Kosmidou M, Karanika I, Petrakis V, Adamis G, Gatselis NK, Fragkou A, Rapti A, Taddei E, Kalomenidis I, Chrysos G, Bertoli G, Kainis I, Alexiou Z, Castelli F, Saverio Serino F, Bakakos P, Nicastrì E, Tzavara V, Kostis E, Dagna L, Koukidou S, Tzatzagou G, Chini M, Bassetti M, Trakatelli C, Tsoukalas G, Selmi C, Samarkos M, Pырpasopoulou A, Masgala A, Antonakis E, Argyraki A, Akinosoglou K, Sympardi S, Panagopoulos P, Milionis H, Metallidis S, Syrigos KN, Angel A, Dalekos GN, **Netea MG**, Giamarellos-Bourboulis EJ. Interferon gamma-induced protein 10 (IP-10) for the early prognosis of the risk for severe respiratory failure and death in COVID-19 pneumonia. *Cytokine*. 2023 Feb;162:156111. doi: 10.1016/j.cyto.2022.156111. Epub 2022 Dec 14. PMID: 36529030 Free PMC article.

- Sánchez-Maldonado JM, Cabrera-Serrano AJ, Chattopadhyay S, Campa D, Garrido MDP, Macaudo A, Ter Horst R, Jerez A, **Netea MG**, Li Y, Hemminki K, Canzian F, Försti A, Sainz J. GWAS-Identified Variants for Obesity Do Not Influence the Risk of Developing Multiple Myeloma: A Population-Based Study and Meta-Analysis. *Int J Mol Sci.* 2023 Mar 23;24(7):6029. doi: 10.3390/ijms24076029. PMID: 37047000 Free PMC article.
- Sandhoff R, **Sandhoff K**. Neuronal Ganglioside and Glycosphingolipid (GSL) Metabolism and Disease : Cascades of Secondary Metabolic Errors Can Generate Complex Pathologies (in LSDs). *Adv Neurobiol.* 2023;29:333-390. doi: 10.1007/978-3-031-12390-0_12. PMID: 36255681
- Schälte Y, Hasenauer J**. Informative and adaptive distances and summary statistics in sequential approximate Bayesian computation. *PLoS One.* 2023 May 22;18(5):e0285836. doi: 10.1371/journal.pone.0285836. eCollection 2023. PMID: 37216372 Free PMC article.
- Schälte Y, Fröhlich F, Jost PJ, Vanhoefer J, Pathirana D, Stapor P, Lakrisenko P, Wang D, Raimúndez E, Merkt S, Schmiester L, Städter P, Grein S, Dudkin E, Doresic D, Weindl D, Hasenauer J**. pyPESTO: a modular and scalable tool for parameter estimation for dynamic models. *Bioinformatics.* 2023 Nov 1;39(11):btad711. doi: 10.1093/bioinformatics/btad711. PMID: 37995297 Free PMC article.
- Scheibenbogen C, Bellmann-Strobl JT, Heindrich C, Wittke K, Stein E, Franke C, Prüss H, Preßler H, Machule ML, Audebert H, Finke C, Zimmermann HG, Sawitzki B, Meisel C, Toelle M, Krueger A, Aschenbrenner AC, **Schultze JL**, Beyer MD, Ralser M, Müllleder M, Sander LE, Konietzschke F, Paul F, Stojanov S, Bruckert L, Hedderich DM, Knolle F, Riemekasten G, Vehreschild MJGT, Cornely OA, Behrends U, Burock S. Fighting Post-COVID and ME/CFS - development of curative therapies. *Front Med (Lausanne).* 2023 Jun 15;10:1194754. doi: 10.3389/fmed.2023.1194754. eCollection 2023. PMID: 37396922 Free PMC article.
- Schoofs A, Miroshnikow A, Schlegel P, Zinke I, Schneider-Mizell CM, Cardona A, Pankratz MJ**. Serotonergic reinforcement of a complete swallowing circuit. *bioRxiv* 2023.05.26.542464, doi: <https://doi.org/10.1101/2023.05.26.542464>
- Schoofs A, Pankratz MJ**. Neuroscience: Moving thoughts control insulin release. *Curr Biol.* 2023 Apr 10;33(7):R274-R276. doi: 10.1016/j.cub.2023.02.054. PMID: 37040711
- Schrijver DP, Röring RJ, Deckers J, de Dreu A, Toner YC, Prevot G, Priem B, Munitz J, Nugraha EG, van Elsas Y, Azzun A, Anbergen T, Groh LA, Becker AMD, Pérez-Medina C, Oosterwijk RS, Novakovic B, Moorlag SJCFM, Jansen A, Pickkers P, Kox M, Beldman TJ, Kluza E, van Leent MMT, Teunissen AJP, van der Meel R, Fayad ZA, Joosten LAB, Fisher EA, Merckx M, **Netea MG**, Mulder WJM. Resolving sepsis-induced immunoparalysis via trained immunity by targeting interleukin-4 to myeloid cells. *Nat Biomed Eng.* 2023 Sep;7(9):1097-1112. doi: 10.1038/s41551-023-01050-0. Epub 2023 Jun 8. PMID: 37291433 Free PMC article.
- Schultze JL**. Building Trust in Medical Use of Artificial Intelligence - The Swarm Learning Principle. *Journal of CME* 2023. 12(1):2162202
- Shahid K, Khan K, Badshah Y, Mahmood Ashraf N, **Hamid A**, Trembley JH, Shabbir M, Afsar T, Almajwal A, Abusharha A, Razak S. Pathogenicity of PKCγ Genetic Variants-Possible Function as a Non-Invasive Diagnostic Biomarker in Ovarian Cancer. *Genes (Basel).* 2023 Jan 16;14(1):236. doi: 10.3390/genes14010236. PMID: 36672978
- Shakiba MH, **Gemünd I**, Beyer M, **Bonaguro L**. Lung T cell response in COVID-19. *Front Immunol.* 2023 Feb 16;14:1108716. doi: 10.3389/fimmu.2023.1108716. eCollection 2023. PMID: 36875071 Free PMC article. Review.
- Sheffler W, Yang EC, Dowling Q, Hsia Y, Fries CN, **Stanislaw J**, Langowski MD, Brandys M, Li Z, Skotheim R, Borst AJ, **Khmelinskaia A**, King NP, Baker D. Fast and versatile sequence-independent protein docking for nanomaterials design using RPxDock. *PLoS Comput Biol.* 2023 May 22;19(5):e1010680. doi: 10.1371/journal.pcbi.1010680. Online ahead of print. PMID: 37216343
- Shin H, Prasad V, Lupancu T, Malik S, Achuthan A, Biondo M, Kingwell BA, **Thiem M, Gottschalk M, Weighardt H, Förster I**, de Steiger R, Hamilton JA, Lee KM. The GM-CSF/CCL17 pathway in obesity-associated osteoarthritic pain and disease in mice. *Osteoarthritis Cartilage.* 2023 Oct;31(10):1327-1341. doi: 10.1016/j.joca.2023.05.008. Epub 2023 May 22. PMID: 37225052
- Siemers FM, Bajorath J**. Differences in learning characteristics between support vector machine and random forest models for compound classification revealed by Shapley value analysis. *Sci Rep.* 2023 Apr 12;13(1):5983. doi: 10.1038/s41598-023-33215-x. PMID: 37045972 Free PMC article.

- Sikkema L, Ramírez-Suástegui C, Strobl DC, Gillett TE, Zappia L, Madisoos E, Markov NS, Zaragosi LE, Ji Y, Ansari M, Arguel MJ, Apperloo L, Banchemo M, Bécavin C, Berg M, Chichelnitskiy E, Chung MI, Collin A, Gay ACA, Gote-Schniering J, Hooshiar Kashani B, Inecik K, Jain M, **Kapellos TS**, Kole TM, Leroy S, Mayr CH, Oliver AJ, von Papen M, Peter L, Taylor CJ, Walzthoeni T, Xu C, Bui LT, De Donno C, Dony L, Faiz A, Guo M, Gutierrez AJ, Heumos L, Huang N, Ibarra IL, Jackson ND, Kadur Lakshminarasimha Murthy P, Lotfollahi M, Tabib T, Talavera-López C, Travaglini KJ, Wilbrey-Clark A, Worlock KB, Yoshida M; Lung Biological Network Consortium; van den Berge M, Bossé Y, Desai TJ, Eickelberg O, Kaminski N, Krasnow MA, Lafyatis R, Nikolic MZ, Powell JE, Rajagopal J, Rojas M, Rozenblatt-Rosen O, Seibold MA, Sheppard D, Shepherd DP, Sin DD, Timens W, Tsankov AM, Whitsett J, Xu Y, Banovich NE, Barbry P, Duong TE, Falk CS, Meyer KB, Kropski JA, Pe'er D, Schiller HB, Tata PR, **Schultze JL**, Teichmann SA, Misharin AV, Nawijn MC, Luecken MD, Theis FJ. An integrated cell atlas of the lung in health and disease. *Nat Med.* 2023 Jun;29(6):1563-1577. doi: 10.1038/s41591-023-02327-2. Epub 2023 Jun 8. PMID: 37291214 Free PMC article.
- Silkenath B, Kläge D, Altwein H, Schmidhäuser N, **Mayer G**, Hartig JS, Wittmann V. Phosphonate and Thiasugar Analogues of Glucosamine-6-phosphate: Activation of the glmS Riboswitch and Antibiotic Activity. *ACS Chem Biol.* 2023 Oct 20;18(10):2324-2334. doi: 10.1021/acscchembio.3c00452. Epub 2023 Oct 4. PMID: 37793187 Free PMC article.
- Singh RK, Reuber EE, Bruno M, **Netea MG**, Seeberger PH. Synthesis of oligosaccharides to identify an immunologically active epitope against *Candida auris* infection. *Chem Sci.* 2023 Jun 23;14(27):7559-7563. doi: 10.1039/d3sc01242e. eCollection 2023 Jul 12. PMID: 37449061 Free PMC article.
- Solomonidi N, Vlachoyiannopoulos PG, Pappa M, Liantinioti G, Ktena S, Theotikos E, Elezoglou A, **Netea MG**, Giamarellos-Bourboulis EJ. A randomized clinical trial of bermekimab treatment for clinical improvement of systemic sclerosis. *iScience.* 2023 Aug 19;26(9):107670. doi: 10.1016/j.isci.2023.107670. eCollection 2023 Sep 15. PMID: 37680472 Free PMC article.
- Stängle D, Silkenath B, **Gehle P, Esser A, Mayer G**, Wittmann V. Carba-Sugar Analogs of Glucosamine-6-Phosphate: New Activators for the glmS Riboswitch. *Chemistry.* 2023 Jan 12;29(3):e202202378. doi: 10.1002/chem.202202378. Epub 2022 Nov 27. PMID: 36326082
- Steiner S, Fehrer A, Hoheisel F, Schoening S, Aschenbrenner A, Babel N, Bellmann-Strobl J, Finke C, Fluge Ø, Froehlich L, Goebel A, Grande B, Haas JP, Hohberger B, Jason LA, Komaroff AL, Lacerda E, Liebl M, Maier A, Mella O, Nacul L, Paul F, Prusty BK, Puta C, Riemekasten G, Ries W, Rowe PC, Sawitzki B, Shoenfeld Y, **Schultze JL**, Seifert M, Sepúlveda N, Sotzny F, Stein E, Stingl M, Ufer F, Veauthier C, Westermeier F, Wirth K, Wolfarth B, Zalewski P, Behrends U, Scheibenbogen C. Understanding, diagnosing, and treating Myalgic encephalomyelitis/chronic fatigue syndrome - State of the art: Report of the 2nd international meeting at the Charité Fatigue Center. *Autoimmun Rev.* 2023 Nov;22(11):103452. doi: 10.1016/j.autrev.2023.103452. Epub 2023 Sep 22. PMID: 37742748 Review.
- Stolk RF, Bruse N, Ter Horst R, Jansen A, Ricaño Ponce I, Gerretsen J, van der Hoeven J, Kumar V, **Netea MG**, Pickkers P, Kox M. The impact of ADRB2 polymorphisms on immune responses and norepinephrine-induced immunosuppression. *J Leukoc Biol.* 2023 Jan 10;113(1):84-92. doi: 10.1093/jleuko/qiac005. PMID: 36822159
- Suen TK**, Moorlag SJCFM, Li W, de Bree CLJ, Koeken VACM, Mourits VP, Dijkstra H, Lemmers H, Bhat J, Xu CJ, Joosten LAB, Schultze JL, Li Y, **Placek K, Netea MG**. BCG vaccination induces innate immune memory in gamma delta T cells in humans. *J Leukoc Biol.* 2023 Sep 6:qiad103. doi: 10.1093/jleuko/qiad103. Online ahead of print. PMID: 37672677
- Sun SJ, Aguirre-Gamboa R, de Bree LCJ, Sanz J, Dumaine A, Joosten LAB, Divangahi M, **Netea MG**, Barreiro LB. BCG vaccination impacts the epigenetic landscape of progenitor cells in human bone marrow. *bioRxiv.* 2023 Nov 28:2023.11.28.569076. doi: 10.1101/2023.11.28.569076. Preprint. PMID: 38077046 Free PMC article.
- Taks EJM, Föhse K, J C F M Moorlag S, Hoogerwerf J, van Crevel R, van Werkhoven CH, **Netea MG**, Ten Oever J. Routine vaccination for influenza and pneumococcal disease and its effect on COVID-19 in a population of Dutch older adults. *Vaccine X.* 2023 Jul 6;14:100344. doi: 10.1016/j.jvax.2023.100344. eCollection 2023 Aug. PMID: 37484869 Free PMC article.
- Taks EJM, Moorlag SJCFM, Föhse K, Simonetti E, van der Gaast-de Jongh CE, van Werkhoven CH, Bonten MJM, Oever JT, de Jonge MI, van de Wijgert JHHM, **Netea MG**. The impact of Bacillus Calmette-Guérin vaccination on antibody response after COVID-19 vaccination. *iScience.* 2023 Sep 28;26(11):108062. doi: 10.1016/j.isci.2023.108062. eCollection 2023 Nov 17. PMID: 37860692 Free PMC article.
- Tamura S**, Miyao T, **Bajorath J**. Large-scale prediction of activity cliffs using machine and deep learning methods of increasing complexity. *J Cheminform.* 2023 Jan 7;15(1):4. doi: 10.1186/s13321-022-00676-7. PMID: 36611204 Free PMC article.
- Temba GS, Vadaq N, Kullaya V, **Pecht T**, Lionetti P, Cavalieri D, **Schultze JL**, Kavishe R, Joosten LAB, van der Ven AJ, Mmbaga BT, **Netea MG**, de Mast Q. Differences in the inflammatory proteome of East African and Western European adults and associations with environmental and dietary factors. *Elife.* 2023 Aug 9;12:e82297. doi: 10.7554/eLife.82297. PMID: 37555575 Free PMC article.
- Teufel LU, **Netea MG**, van de Veerdonk FL, Dinarello CA, Joosten LAB, Arts RJW. Opposing Effects of Interleukin-36 γ and Interleukin-38 on Trained Immunity. *Int J Mol Sci.* 2023 Jan 24;24(3):2311. doi: 10.3390/ijms24032311. PMID: 36768634 Free PMC article.

- Thomas JR**, Appios A, Calderbank EF, Yoshida N, Zhao X, Hamilton RS, Moffett A, Sharkey A, Laurenti E, Hanna CW, McGovern N. Primitive haematopoiesis in the human placenta gives rise to macrophages with epigenetically silenced HLA-DR. *Nat Commun.* 2023 Mar 30;14(1):1764. doi: 10.1038/s41467-023-37383-2. PMID: 36997537 Free PMC article.
- Umedera K, Yoshimori A, Chen H, Kouji H, Nakamura H, **Bajorath J**. DeepCubist: Molecular Generator for Designing Peptidomimetics based on Complex three-dimensional scaffolds. *J Comput Aided Mol Des.* 2023 Feb;37(2):107-115. doi: 10.1007/s10822-022-00493-y. Epub 2022 Dec 3. PMID: 36462089 Free PMC article.
- Vadaq N, Zhang Y, Vos WA, Groenendijk AL, Blaauw MJ, van Eekeren LE, Jacobs-Cleophas M, van de Wijer L, Dos Santos JC, Gasem MH, Joosten LA, **Netea MG**, de Mast Q, Fu J, van der Ven AJ, Matzaraki V. High-throughput proteomic analysis reveals systemic dysregulation in virally suppressed people living with HIV. *JCI Insight.* 2023 Jun 8;8(11):e166166. doi: 10.1172/jci.insight.166166. PMID: 37079385 Free PMC article.
- Vaisband M, Schubert M, Gassner FJ, Geisberger R, Greil R, Zaborsky N, **Hasenauer J**. Validation of genetic variants from NGS data using deep convolutional neural networks. *BMC Bioinformatics.* 2023 Apr 20;24(1):158. doi: 10.1186/s12859-023-05255-7. PMID: 37081386 Free PMC article.
- van den Munckhof ICL, Bahrar H, Schraa K, Brand T, Ter Horst R, van der Graaf M, Dekker HM, Stienstra R, de Graaf J, Joosten LAB, **Netea MG**, Riksen NP, Rutten JHW. Sex-specific association of visceral and subcutaneous adipose tissue volumes with systemic inflammation and innate immune cells in people living with obesity. *Int J Obes (Lond).* 2023 Dec 22. doi: 10.1038/s41366-023-01444-9. Online ahead of print. PMID: 38135702
- van Echten-Deckert G**. The role of sphingosine 1-phosphate metabolism in brain health and disease. *Pharmacol Ther.* 2023 Apr;244:108381. doi: 10.1016/j.pharmthera.2023.108381. Epub 2023 Mar 11. PMID: 36907249 Review.
- van Genugten EAJ, van Lith TJ, van den Heuvel FMA, van Steenis JL, Ten Heggeler RM, Brink M, Rodwell L, Meijer FJA, Lobeek D, Hagmolen Of Ten Have W, van de Veerdonk FL, **Netea MG**, Prokop M, Nijveldt R, Tuladhar AM, Aarntzen EHJG. Gallium-68 labelled RGD PET/CT imaging of endothelial activation in COVID-19 patients. *Sci Rep.* 2023 Jul 17;13(1):11507. doi: 10.1038/s41598-023-37390-9. PMID: 37460572 Free PMC article.
- Vazquez-Armendariz AI**, Tata PR. Recent advances in lung organoid development and applications in disease modeling. *J Clin Invest.* 2023 Nov 15;133(22):e170500. doi: 10.1172/JCI170500. PMID: 37966116 Free PMC article. Review.
- Verstegen NJM, Pollastro S, Unger PA, Marsman C, Elias G, Jorritsma T, Streutker M, Bassler K, Haendler K, Rispens T, **Schultze JL**, Ten Brinke A, Beyer M, van Ham SM. Single-cell analysis reveals dynamics of human B cell differentiation and identifies novel B and antibody-secreting cell intermediates. *Elife.* 2023 Mar 2;12:e83578. doi: 10.7554/eLife.83578. PMID: 36861964 Free PMC article.
- Viola MF, Chavero-Pierres M, Modave E, Delfini M, Stakenborg N, Estévez MC, Fabre N, Appeltans I, Martens T, Vandereyken K, **Theobald H**, Van Herck J, Petry P, Verheijden S, De Schepper S, Sifrim A, Liu Z, Ginhoux F, Azhar M, **Schlitzer A**, Matteoli G, Kierdorf K, Prinz M, Vanden Berghe P, Voet T, Boeckxstaens G. Dedicated macrophages organize and maintain the enteric nervous system. *Nature.* 2023 Jun;618(7966):818-826. doi: 10.1038/s41586-023-06200-7. Epub 2023 Jun 14. PMID: 37316669
- Wang D**, Zhang J, Huang Z, Yang Y, Fu T, Yang Y, Lyu Y, Jiang J, Qiu L, Cao Z, Zhang X, You Q, Lin Y, Zhao Z, Tan W. Robust Covalent Aptamer Strategy Enables Sensitive Detection and Enhanced Inhibition of SARS-CoV-2 Proteins. *ACS Cent Sci.* 2023 Jan 2;9(1):72-83. doi: 10.1021/acscentsci.2c01263. eCollection 2023 Jan 25. PMID: 36712483
- Wang JYJ, **Khmelniskaia A**, Sheffler W, Miranda MC, Antanasijevic A, Borst AJ, Torres SV, Shu C, Hsia Y, Nattermann U, Ellis D, Walkey C, Ahlrichs M, Chan S, Kang A, Nguyen H, Sydeman C, Sankaran B, Wu M, Bera AK, Carter L, Fiala B, Murphy M, Baker D, Ward AB, King NP. Improving the secretion of designed protein assemblies through negative design of cryptic transmembrane domains. *Proc Natl Acad Sci U S A.* 2023 Mar 14;120(11):e2214556120. doi: 10.1073/pnas.2214556120. Epub 2023 Mar 8. PMID: 36888664 Free PMC article.
- Weber D, Vogt K, **Miroschnikow A**, **Pankratz MJ**, Thum AS. Four Individually Identified Paired Dopamine Neurons Signal Taste Punishment in Larval *Drosophila*. *bioRxiv* 2023.07.26.550661. doi: <https://doi.org/10.1101/2023.07.26.550661>
- Wollnitzke P, Wagner R, Afsar SY, Werner M, Geschold R, Müller CE, Wertz O, **van Echten-Deckert G**, Menche D. Synthesis and biological evaluation of simplified ajudazol derivatives reveal potent 5-lipoxygenase inhibition and considerable apoptotic activity in neuroblastoma cells. *Bioorg Med Chem Lett.* 2023 Oct 1;94:129464. doi: 10.1016/j.bmcl.2023.129464. Epub 2023 Aug 25. PMID: 37634760
- Wunderling K**, **Zurkovic J**, **Zink F**, **Kuerschner L**, **Thiele C**. Triglyceride cycling enables modification of stored fatty acids. *Nat Metab.* 2023 Apr;5(4):699-709. doi: 10.1038/s42255-023-00769-z. Epub 2023 Apr 3. PMID: 37012495 Free PMC article.

- Xerxa E, Miljković F, Bajorath J.** Data-Driven Global Assessment of Protein Kinase Inhibitors with Emphasis on Covalent Compounds. *J Med Chem.* 2023 Jun 8;66(11):7657-7665. doi: 10.1021/acs.jmedchem.3c00621. Epub 2023 May 22. PMID: 37212701
- Xerxa E, Laufkötter O, Bajorath J.** Systematic Analysis of Covalent and Allosteric Protein Kinase Inhibitors. *Molecules.* 2023 Aug 1;28(15):5805. doi: 10.3390/molecules28155805. PMID: 37570774 Free PMC article.
- Xerxa E, Bajorath J.** Data sets of human and mouse protein kinase inhibitors with curated activity data including covalent inhibitors. *Future Sci OA.* 2023 Aug 16;9(9):FSO892. doi: 10.2144/foa-2023-0088. eCollection 2023 Oct. PMID: 37752915 Free PMC article.
- Yan J, Nielsen TB, Lu P, Talyansky Y, Slarve M, Reza H, Novakovic B, **Netea MG**, Keller AE, Warren T, DiGiandomenico A, Sellman BR, Luna BM, Spellberg B. A protein-free vaccine stimulates innate immunity and protects against nosocomial pathogens. *Sci Transl Med.* 2023 Oct 4;15(716):eadf9556. doi: 10.1126/scitranslmed.adf9556. Epub 2023 Oct 4. PMID: 37792959
- Yang EC, Divine R, Miranda MC, Borst AJ, Sheffler W, Zhang JZ, Decarreau J, Saragovi A, Abedi M, Goldbach N, Ahlrichs M, Dobbins C, Hand A, Cheng S, Lamb M, Levine PM, Chan S, Skotheim R, Fallas J, Ueda G, Lubner J, Somiya M, **Khmelinskaia A**, King NP, Baker D. Computational design of non-porous, pH-responsive antibody nanoparticles. *bioRxiv [Preprint].* 2023 Apr 18:2023.04.17.537263. doi: 10.1101/2023.04.17.537263. PMID: 37131615 Free PMC article.
- Yoshimori A, Chen H, **Bajorath J.** Chemical language models for applications in medicinal chemistry. *Future Med Chem.* 2023 Jan;15(2):119-121. doi: 10.4155/fmc-2022-0315. Epub 2023 Feb 2. PMID: 36727442 No abstract available.
- Yoshimori A, **Bajorath J.** Motif2Mol: Prediction of New Active Compounds Based on Sequence Motifs of Ligand Binding Sites in Proteins Using a Biochemical Language Model. *Biomolecules.* 2023 May 13;13(5):833. doi: 10.3390/biom13050833. PMID: 37238703 Free PMC article.
- Yuzeir A, Bejarano DA,** Grein S, **Hasenauer J, Schlitzer A, Yu J.** IntestLine: a shiny-based application to map the rolled intestinal tissue onto a line. *Bioinformatics.* 2023 Apr 3;39(4):btad140. doi: 10.1093/bioinformatics/btad140. PMID: 36943334 Free PMC article.
- Zafar S, Khan K, Badshah Y, Shahid K, Trembley JH, Hafeez A, Ashraf NM, **Arslan H,** Shabbir M, Afsar T, Almajwal A, Razak S. Correction: Exploring the prognostic significance of PKC ϵ variants in cervical cancer. *BMC Cancer.* 2023 Oct 11;23(1):963. doi: 10.1186/s12885-023-11416-x. PMID: 37821893 Free PMC article. No abstract available.
- Zhang Y, Andreu-Sánchez S, Vadaq N, Wang D, Matzaraki V, van der Heijden WA, Gacesa R, Weersma RK, Zhernakova A, Vandekerckhove L, de Mast Q, Joosten LAB, **Netea MG,** van der Ven AJAM, Fu J. Gut dysbiosis associates with cytokine production capacity in viral-suppressed people living with HIV. *Front Cell Infect Microbiol.* 2023 Jul 31;13:1202035. doi: 10.3389/fcimb.2023.1202035. eCollection 2023. PMID: 37583444 Free PMC article.
- Zhe M, Wu X, **Yu P,** Xu J, Liu M, Yang G, Xiang Z, Xing F, Ritz U. Recent Advances in Decellularized Extracellular Matrix-Based Bioinks for 3D Bioprinting in Tissue Engineering. *Materials (Basel).* 2023 Apr 18;16(8):3197. doi: 10.3390/ma16083197. PMID: 37110034 Free PMC article. Review.
- Zhou F, Tichy AM, Imambocus BN, Sakharwade S, Rodriguez Jimenez FJ, González Martínez M, Jahan I, Habib M, Wilhelmy N, Burre V, Lömker T, Sauter K, Helfrich-Förster C, Pielage J, Grunwald Kadow IC, Janovjak H, **Soba P.** Optimized design and in vivo application of optogenetically functionalized *Drosophila* dopamine receptors. *Nat Commun.* 2023 Dec 19;14(1):8434. doi: 10.1038/s41467-023-43970-0. PMID: 38114457 Free PMC article.
- Zielinski M, Peralta Reyes FS, Gremer L, Schemmert S, Frieg B, **Schäfer LU,** Willuweit A, Donner L, Elvers M, Nilsson LNG, Syvänen S, Sehlin D, Ingelsson M, Willbold D, Schröder GF. Cryo-EM of A β fibrils from mouse models find tg-APP^{Arctic} fibrils resemble those found in patients with sporadic Alzheimer's disease. *Nat Neurosci.* 2023 Dec;26(12):2073-2080. doi: 10.1038/s41593-023-01484-4. Epub 2023 Nov 16. PMID: 37973869 Free PMC article.